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U.S. DEPARTMENT OF TRANSPORTATION

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

LABORATORY TEST PROCEDURE

FOR

49 CFR Part 537, AUTOMOTIVE FUEL ECONOMY REPORTS



ENFORCEMENT
Office of Vehicle Safety Compliance
Mail Code: NVS-220
1200 New Jersey Ave. SE
Washington, DC 20590

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REVISION CONTROL LOG FOR OVSC LABORATORY TEST PROCEDURES

TP-537 Automotive Fuel Economy Reports

TEST PROCEDURE		49 CFR Part 537			
REV. No.	DATE	AMENDMENT	EFFECTIVE DATE	DESCRIPTION	
00	Preliminary 05/02/08	71FR17566 4/6/06 Final Rule	8/4/06	Final rule (71FR17566) establishes Footprint definition for Average Fuel Economy Standards for Light Trucks	
		71FR19449 4/14/06		Final rule (71FR19449) corrects revised Footprint definition.	
		Final Rule 73FR24352 5/02/08 NPRM		NPRM (73FR24352) proposes to use this test procedure to validate the wheelbase, track width, and footprint data provided by manufacturers in their pre-model year reports. The NPRM also stated that NHTSA seeks comments on the appropriateness of the test procedure.	
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1. PURPOSE AND APPLICATION

This document is a laboratory test procedure provided by the National Highway Traffic Safety Administration (NHTSA), Office of Vehicle Safety Compliance (OVSC) for the purpose of presenting guidelines for a uniform testing data and information recording format, and providing suggestions for the use of specific equipment and procedures for contracted testing laboratories. The data correspond to specific requirements of Federal Regulations and Federal Motor Vehicle Safety Standard(s) (FMVSS). The OVSC test procedures include requirements that are general in scope to provide flexibility for contracted laboratories to perform compliance testing and are not intended to limit or restrain a contractor from developing or utilizing any testing techniques or equipment which will assist in procuring the required compliance test data. These test procedures do not constitute an endorsement or recommendation for use of any particular product or testing method.

Prior to conducting compliance testing, contracted laboratories are required to submit a detailed test procedure to the COTR to demonstrate concurrence with the OVSC laboratory test procedure and the applicable Federal Regulations and FMVSS. If any contractor views any part of an OVSC laboratory test procedure to be in conflict with the regulation or standard or observes deficiencies in a laboratory test procedure, the contractor is required to advise the Contracting Officer's Technical Representative (COTR) and resolve the discrepancy prior to the start of compliance testing or as soon as practicable. The contractor's test procedure must include a step-by-step description of the methodology and detailed check-off sheets. Detailed check-off sheets shall also be provided for the testing instrumentation including a complete listing of the test equipment with make and model numbers. The list of test equipment shall include instrument accuracy and calibration dates. All equipment shall be calibrated in accordance with the manufacturer's instructions. There shall be no contradictions between the laboratory test procedure and the contractor's in-house test procedure. Written approval of the in-house test procedures shall be obtained from the COTR before initiating the compliance test program.

NOTE: The OVSC Laboratory Test Procedures, prepared for the limited purpose of use by independent laboratories under contract to conduct compliance tests for the OVSC, are not rules, regulations or NHTSA interpretations regarding the meaning of a Federal Regulation or FMVSS. The laboratory test procedures are not intended to limit the requirements of the applicable Federal Regulations or FMVSS(s). In some cases, the OVSC laboratory test procedures do not include all of the various Federal Regulation or FMVSS minimum performance requirements. Recognizing applicable test tolerances, the laboratory test procedures may specify test conditions that are less severe than the minimum requirements of the standard. In addition, the laboratory test procedures may be modified by the OVSC at any time without notice, and the COTR may direct or authorize contractors to deviate from these procedures, as long as the tests are performed in a manner consistent with the Federal regulation or standard itself and within the scope of the contract. Laboratory test procedures may not be relied upon to create any right or benefit in any person. Therefore, compliance of a vehicle or item of motor vehicle equipment is not necessarily guaranteed if the manufacturer limits its certification tests to those described in the OVSC laboratory test procedures.

2. GENERAL REQUIREMENTS

49 CFR Part 537 establishes requirements for automobile manufacturers to submit reports to NHTSA regarding their efforts to improve automotive fuel economy. For each current model year, each manufacturer shall submit a pre-model year and mid-model year report providing detailed information about their vehicle fleet configurations and fuel economy figures. The reports are used by NHTSA in evaluating a manufacturer's plans for complying with average fuel economy standards. The pre-model year report must include vehicle wheelbase, track width and footprint data used by the vehicle manufacturer to determine vehicle fuel economy target standards. This test procedure specifies the procedure used for determining a vehicle's footprint. The footprint data determined by this test procedure will be used to validate the footprint data provided by manufacturers in their pre-model year reports.

METRIC SYSTEM OF MEASUREMENT

Section 5164 of the Omnibus Trade and Competitiveness Act (Pub. L. 100-418) establishes that the metric system of measurement is the preferred system of weights and measures for trade and commerce in the United States. Executive order 12770 directs Federal agencies to comply with the Act by converting regulatory standards to the metric system after September 30, 1992. In a final rule published on March 15, 1990 (60 FR 13639), NHTSA completed the first phase of metrication, converting English measurements in several regulatory standards to the metric system. Since then, metrication has been applied to other regulatory standards (63 FR 28912).

Accordingly, the OVSC laboratory test procedures include revisions to comply with governmental directives in using the metric system. Regulatory standards converted to metric units are required to use metric measurements in the test procedures, whereas standards using English units are allowed to use English measurements or to use English measurements in combination with metric equivalents in parentheses. For any testing equipment that is not available for direct measurement in metric units, the test laboratory shall calculate the exact metric equivalent by means of a conversion factor carried out to at least five significant digits before rounding consistent with the specified metric requirement.

All final compliance test reports are required to include metric measurements for standards using metrication.

NOTE: The methodology for rounding measurement in the test reports shall be made in accordance with ASTM E29-06b, "Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications."

3. SECURITY

The contractor shall provide appropriate security measures to protect the OVSC test vehicles and Government Furnished Property (GFP) from unauthorized personnel during the entire compliance testing program. The contractor is financially responsible for any acts of theft and/or vandalism which occur during the storage of test vehicles and GFP. Any security problems which arise shall be reported by telephone to the Industrial Property Manager (IPM), Office of Acquisition Management, within two working days after the incident. A letter containing specific details of the security problem shall be sent to the IPM (with copy to the COTR) within 48 hours.

The contractor shall protect and segregate the data that evolves from compliance testing before and after each vehicle test. No information concerning the vehicle safety compliance testing program shall be released to anyone except the COTR, unless specifically authorized by the COTR or the COTR's Division Chief.

NOTE: No individuals, other than contractor personnel directly involved in the compliance testing program or OVSC personnel, shall be allowed to witness any vehicle or equipment item compliance test or test dummy calibration unless specifically authorized by the COTR.

4. GOOD HOUSEKEEPING

Contractors shall maintain the entire vehicle compliance testing area, test fixtures and instrumentation in a neat, clean and painted condition with test instruments arranged in an orderly manner consistent with good test laboratory housekeeping practices.

5. TEST SCHEDULING AND MONITORING

The contractor shall submit a test schedule to the COTR prior to conducting the first compliance test. Tests shall be completed at intervals as required in the contract. If not specified, the first test shall be conducted within 6 weeks after receiving the first delivered unit. Subsequent tests shall be completed in no longer that 1 week intervals unless otherwise specified by the COTR.

Scheduling of tests shall be adjusted to permit vehicles (or equipment, whichever applies) to be tested to other FMVSSs as may be required by the OVSC. All compliance testing shall be coordinated with the COTR in order to allow monitoring by the COTR and/or other OVSC personnel if desired. The contractor shall submit a monthly test status report and a vehicle status report (if applicable) to the COTR. The vehicle status report shall be submitted until all vehicles are disposed of. The status report forms are provided in the forms section.

6. TEST DATA DISPOSITION

The Contractor shall make all preliminary compliance test data available to the COTR on location within 30 minutes after the test. Final test data, including digital printouts and computer generated plots, shall be available to the COTR in accordance with the contract schedule or if not specified within two working days. Additionally, the Contractor shall analyze the preliminary test results as directed by the COTR.

All backup data sheets, strip charts, recordings, plots, technicians' notes, etc., shall be either sent to the COTR or destroyed at the conclusion of each delivery order, purchase order, etc.

The contractor shall protect and segregate the data that evolves from compliance testing before and after each test.

TEST DATA LOSS

A. INVALID TEST DESCRIPTION

An invalid compliance test is one, which does not conform precisely to all requirements/specifications of the OVSC Laboratory Test Procedure and Statement of Work applicable to the test.

B. INVALID TEST NOTIFICATION

The Contractor shall notify NHTSA of any test not meeting all requirements/specifications of the OVSC Laboratory Test Procedure and Statement of Work applicable to the test, by telephone, within 24 hours of the test and send written notice to the COTR within 48 hours or the test completion.

C. RETEST NOTIFICATION

The Contracting Officer of NHTSA is the only NHTSA official authorized to notify the Contractor that a retest is required. The retest shall be completed within 2 weeks after receipt of notification by the Contracting Officer that a retest is required.

D. WAIVER OF RETEST

NHTSA, in its sole discretion, reserves the right to waive the retest requirement. This provision shall not constitute a basis for dispute over the NHTSA's waiving or not waiving any requirement.

6. TEST DATA DISPOSITION....Continued

E. TEST VEHICLE

NHTSA shall furnish only one vehicle for each test ordered. The Contractor shall furnish the test vehicle required for the retest. The retest vehicle shall be equipped as the original vehicle. The original vehicle used in the invalid test shall remain the property of NHTSA, and the retest vehicle shall remain the property of the Contractor. The Contractor shall retain the retest vehicle for a period not exceeding 180 days if it fails the test. If the retest vehicle passes the test, the Contractor may dispose of it upon notification from the COTR that the test report has been accepted.

F. TEST REPORT

No test report is required for any test that is determined to be invalid unless NHTSA specifically decides, in writing, to require the Contractor to submit such report. The test data from the invalid test must be safeguarded until the data from the retest has been accepted by the COTR. The electronic data, draft final test report, dummy calibration report, and video shall be submitted within 14 days of the final test. The final test report, dummy calibration report, and video shall be submitted 7 days after receiving comments from the COTR.

G. DEFAULT

The Contractor is subject to the default and subsequent reprocurement costs for nondelivery of valid or conforming test (pursuant to the "Termination for Default" clause in the contract).

H. NHTSA'S RIGHTS

None of the requirements herein stated shall diminish or modify the rights of NHTSA to determine that any test submitted by the Contractor does not conform precisely to all requirements/specifications of the OVSC Laboratory Test Procedure and Statement of Work applicable to the test.

7. GOVERNMENT FURNISHED PROPERTY (GFP)

GFP consist of test vehicles and test dummies. The GFP is authorized by contractual agreement. The contractor is responsible for the following.

A. ACCEPTANCE OF TEST VEHICLES

The contractor has the responsibility of accepting each GFP test vehicle whether delivered by a new vehicle dealership or another vehicle transporter. In both instances,

7. GOVERNMENT FURNISHED PROPERTY (GFP)....Continued

the Contractor acts on behalf of the OVSC when signing an acceptance of the GFP test vehicle delivery order. When a GFP vehicle is delivered, the contractor must verify:

- 1. All options listed on the "window sticker" are present on the test vehicle.
- 2. Tires and wheel rims are new and the same as listed.
- 3. There are no dents or other interior or exterior flaws in the vehicle body.
- 4. The vehicle has been properly prepared and is in running condition.
- 5. The glove box contains an owner's manual, warranty document, consumer information, and extra set of keys.
- 6. Proper fuel filler cap is supplied on the test vehicle.
- 7. Spare tire, jack, lug wrench and tool kit (if applicable) is located in the vehicle cargo area.
- 8. The VIN (vehicle identification number) on the vehicle condition report matches the VIN on the vehicle.
- 9. The vehicle is equipped as specified by the COTR.

A Vehicle Condition form will be supplied to the Contractor by the COTR when the test vehicle is transferred from a new vehicle dealership or between test contracts. The upper half of the form is used to describe the vehicle as initially accepted. The lower half of the Vehicle Condition form provides space for a detailed description of the post-test condition. The contractor must complete a Vehicle Condition form for each vehicle and deliver it to the COTR with the Final Test Report or the report will NOT be accepted for payment.

If the test vehicle is delivered by a government contracted transporter, the contractor should check for damage which may have occurred during transit. GFP vehicle(s) shall not be driven by the contractor on public roadways unless authorized by the COTR.

B. NOTIFICATION OF COTR

The COTR must be notified within 24 hours after a vehicle (and/or equipment item) has been delivered. In addition, if any discrepancy or damage is found at the time of delivery, a copy of the Vehicle Condition form shall be sent to the COTR immediately.

8. CALIBRATION OF TEST INSTRUMENTS

Before the Contractor initiates the vehicle safety compliance test program, a test instrumentation calibration system must be implemented and maintained in accordance with established calibration practices. The calibration system shall include the following as a minimum:

- A. Standards for calibrating the measuring and test equipment shall be stored and used under appropriate environmental conditions to assure their accuracy and stability.
- B. All measuring instruments and standards shall be calibrated by the Contractor, or a commercial facility, against a higher order standard at periodic intervals not exceeding 12 months for instruments and 12 months for the calibration standards except for static types of measuring devices such as rulers, weights, etc., which shall be calibrated at periodic intervals not to exceed two years. Records, showing the calibration traceability to the National Institute of Standards and Technology (NIST), shall be maintained for all measuring and test equipment.
- C. All measuring and test equipment and measuring standards shall be labeled with the following information:
 - 1. Date of calibration
 - 2. Date of next scheduled calibration
 - 3. Name of the technician who calibrated the equipment
- D. A written calibration procedure shall be provided by the Contractor, which includes as a minimum the following information for all measurement and test equipment:
 - 1. Type of equipment, manufacturer, model number, etc.
 - 2. Measurement range
 - 3. Accuracy
 - 4. Calibration interval
 - 5. Type of standard used to calibrate the equipment (calibration traceability of the standard must be evident)

8. CALIBRATION AND TEST INSTRUMENTATION....Continued

- 6. The actual procedures and forms used to perform the calibrations.
- E. Records of calibration for all test instrumentation shall be kept by the Contractor in a manner that assures the maintenance of established calibration schedules.
- F. All such records shall be readily available for inspection when requested by the COTR. The calibration system shall need the acceptance of the COTR before vehicle safety compliance testing commences.
- G. Test equipment shall receive a system functional check out using a known test input immediately before and after the test. This check shall be recorded by the test technician(s) and submitted with the final report.

Further guidance is provided in the International Standard ISO 10012-1, "Quality Assurance Requirements for Measuring Equipment" and American National Standard ANSI/NCSL Z540-1, "Calibration Laboratories and Measuring and Test Equipment General Requirements."

NOTE: In the event of a failure to meet the standard's minimum performance requirements additional calibration checks of some critically sensitive test equipment and instrumentation may be required for verification of accuracy. The necessity for the calibration will be at the COTR's discretion and shall be performed without additional cost.

9. SUGGESTED TEST EQUIPMENT

- A. Portable tire pressure gage for measuring tire cold inflation pressure
- B. Hand level for determining a level plane for vehicle positioning
- C. Tape measure with 1/16 inch graduated increments for measuring vehicle track width and wheelbase

10. PHOTOGRAPHIC DOCUMENTATION

Digital Photographs

The contractor shall take digital photographs of the test execution procedures. Photographs shall be taken in color and contain clear images. A tag, label or placard identifying the test item, NHTSA number (if applicable) and date shall appear in each photograph and must be legible. Each photograph shall be labeled as to the subject matter. The required resolution for digital photographs is a minimum of 1,600 x 1,200

10. PHOTOGRAPHIC DOCUMENTATION...Continued

pixels. Digital photographs are required to be created in color and in a JPG format. Glare or light from any illuminated or reflective surface should be minimized while taking photographs.

The test reports should include enough photographs to describe the testing in detailed and should be organized in a logical succession of consecutive pictures. The digital photographs should be included in the test report as 8 x 10 or 8½ x 11 inch (203 mm x 254 mm or 215.9 mm x 279 mm pictures). All photographs are required to be included in the test report in the event of a test failure. Any failure must be photographed at various angles to assure complete coverage. Upon request, the photographs should be sent to the COTR on a CD or DVD and saved in a "read only" format to ensure that the digital photographs are the exact pictures taken during testing and have not been altered from the original condition.

Photographic Views

As a minimum the following test photographs shall be included in each vehicle final test report, submitted by the contractor:

- A. 3/4 frontal view from left side of vehicle
- B. Vehicle Certification Label
- C. Vehicle Placard (titled, "Tire and Loading Information")
- D. Tire Inflation Pressure Label (optional label if provided)
- E. Vehicle Window Sticker (Monroney label)

11. DEFINITIONS

FOOTPRINT

The product of the average track width (measure in inches and rounded to the nearest tenth of an inch) times the wheelbase (measure in inches and rounded to the nearest tenth of an inch) divided by 144 and then rounded to the nearest tenth of a square foot.

TRACK WIDTH

The lateral distance between the centerlines of the base tires at ground, including the camber angle.

WHEELBASE

The longitudinal distance between front and rear wheel centerline.

11. DEFINITIONS....Continued

VEHICLE PLACARD AND OPTIONAL TIRE INFLATION PRESSURE LABEL The sources of cold tire inflation pressure recommended by the vehicle manufacturer and provided in the location and format per Federal motor vehicle safety standard (FMVSS) No. 110.

12. TEST VEHICLE INSPECTION AND TEST PREPARATION (Data Sheet 1)

- A. Verify COTR approval of contractor's detailed in-house test procedure.
- B. Review all test preparation, regulation definitions and specifications, and test instrumentation requirements relating to this compliance test. Personnel supervising and/or performing the compliance test shall be thoroughly familiar with all of the requirements.
- C. Review all applicable contents of the vehicle Owner's Manual or equivalent documentation. Check manual for applicable track width and wheelbase specifications.
- D. Inspect test vehicle. Document required test vehicle information.
- E. Document vehicle installed tire size, brand and model. All tires must be new. The vehicle must be tested with the tires installed on the vehicle at the time of initial vehicle sale. From the vehicle's Placard or optional Tire Inflation Pressure Label, identify the vehicle's designated tire size(s). Notify COTR if any tire installed on the vehicle is different from the manufacturer's designated tire size obtained from the Vehicle Placard or optional Tire Inflation Pressure Label, and request further guidance before proceeding.
- F. Obtain and document vehicle related data provided in the current manufacturer pre-model year CAFE report. Determine if the test vehicle is included in the manufacturer's passenger car or light truck vehicle fleet. Record test vehicle wheelbase and track width as specified in the pre-model year report.

13. COMPLIANCE TEST EXECUTION

Personnel supervising and/or performing the compliance test program shall be thoroughly familiar with the requirements, test conditions, and equipment for the test to be conducted. Testing will be accomplished as indicated in section 13.1. Test personnel shall make note of all discrepancies and deviations from the applicable regulation and this Laboratory Test Procedure.

13. COMPLIANCE TEST EXECUTION....Continued

13.1 Footprint

- A. Inflate vehicle tires to the recommended cold inflation pressure as specified on the vehicle placard or tire inflation pressure label.
- B. Position the vehicle on a level surface and adjust the steering wheel so the vehicle's front tires are pointed in the forward direction parallel to the longitudinal centerline of the vehicle.
- C. Verify that the vehicle transmission is locked in the park position and the parking brake, if applicable, is engaged.
- D. Place a mark on the front tread of each front tire at ground level indicating the geometric center of each tires tread width.
- E. Using a tape measure determine the track width of the front axle. The track width is the lateral distance between the centerlines of the base tires at the ground, including the camber angle. The measurement should be made to the nearest 1/8 inch and rounded to the nearest tenth of an inch (example; 3/8" = 0.375" = 0.4").
- F. Repeat the above procedure and determine the track width of the rear axle.

 Measurement shall be taken on the rear tread of the rear tires at ground level.
- G. Using a hand level, place a mark on the ground next to the side of each wheel indicating the vertical intersection between the ground and the geometric center of each wheel.
- H. Using a tape measure determine the wheelbase on the right side of the vehicle. The wheelbase is the longitudinal distance between front and rear wheel centerlines. The measurement should be made to the nearest 1/8 "and rounded to the nearest tenth of an inch (example; 3/8" = 0.375" = 0.4").
- I. Repeat the above procedure and determine the wheelbase on the left side of the vehicle.
- J. Calculate the average track width and wheelbase of the vehicle.
- K. Calculate vehicle "Foot Print" to the nearest tenth of a square foot. The footprint is the product of track width (measured in inches and rounded to the nearest tenth) times wheelbase (measured in inches and rounded to the nearest tenth) divided by 144 and then rounded to the nearest tenth of a square foot.

13. COMPLIANCE TEST EXECUTION....Continued

Compare manufacturer provided base tire, track width, wheelbase and footprint data with the corresponding measured and calculated data and note any discrepancies.

14. POST TEST REQUIREMENTS

- A. Verify all data sheets have been completed and all photographs have been taken.
- B. Remove all instrumentation from vehicle. Return vehicle to its pretest condition.
- C. Complete the Vehicle Condition Report form including a word description of the vehicle's post test condition.
- D. Copy applicable pages of the Owner's Manual for attachment to the final test report.

15. REPORTS

15.1. MONTHLY STATUS REPORTS

The contractor shall submit a monthly Test Status Report and a Vehicle Status Report to the COTR. The Vehicle Status report shall be submitted until all vehicles are disposed of. Samples of the required reports are found in the report forms section.

15.2. APPARENT NONCOMPLIANCE

Any indication of a test failure shall be communicated by telephone to the COTR within 24 hours with written notification mailed within 48 hours (Saturdays and Sundays excluded). A Notice of Test Failure (see report forms section) with a copy of the particular compliance test data sheet(s) and preliminary data plot(s) shall be included. In the event of a test failure, a post test calibration check of some critically sensitive test equipment and instrumentation may be required for verification of accuracy. The necessity for the calibration shall be at the COTR's discretion and shall be performed without additional costs to the OVSC.

15.3 FINAL TEST REPORTS

15.3.1 COPIES

In the case of an apparent test failure, seven paper copies and electronic copies in both Word and pdf formats of the Final Test Report shall be submitted to the COTR for

15. REPORTS....Continued

acceptance within three weeks of test completion. The Final Test Report format to be used by all contractors can be found in the "Report Section".

Where there has been no indication of an apparent noncompliance, three paper copies and electronic copies in both Word and pdf formats of each Final Test Report shall be submitted to the COTR for acceptance within three weeks of test completion. No payment of contractor's invoices for conducting compliance tests will be made prior to the Final Test Report acceptance by the COTR. Contractors are requested to NOT submit invoices before the COTR is provided with copies of the Final Test Report.

Contractors are required to submit the first Final Test Report in draft form within one week after the compliance test is conducted. The contractor and the COTR will then be able to discuss the details of both test conduct and report content early in the compliance test program.

Contractors are required to PROOF READ all Final Test Reports before submittal to the COTR. The OVSC will not act as a report quality control office for contractors. Reports containing a significant number of errors will be returned to the contractor for correction, and a "hold" will be placed on invoice payment for the particular test.

15.3.2 REQUIREMENTS

The Final Test Report and associated documentation (including photographs) are relied upon as the chronicle of the compliance test. The Final Test Report will be released to the public domain after review and acceptance by the COTR.

For these reasons, each final report must be a complete document capable of standing by itself. The contractor should use DETAILED descriptions of all compliance test events. Any events that are not directly associated with the standard but are of technical interest should also be included. The contractor should include as much

DETAIL as possible in the report. Instructions for the preparation of the first three pages of the final test report are provided for standardization.

15.3.3 FIRST THREE PAGES

A. FRONT COVER

A heavy paperback cover (or transparency) shall be provided for the protection of the final report. The information required on the cover is as follows:

15. REPORTS....Continued

(1) Final Report Number such as 537-ABC-XX-001, where -

537 is the Regulation tested

ABC are the initials for the laboratory

XX is the Fiscal Year of the test program

is the Group Number (001 for the 1st test, 002 for the 2nd test, etc.)

(2) Final Report Title And Subtitle such as

SAFETY COMPLIANCE TESTING FOR 49 CFR 537 Automotive Fuel Economy Reports

> ABC Motor Company 20XX Saferider 4-door sedan NHTSA No. CX0401

(3) Contractor's Name and Address such as

COMPLIANCE TESTING LABORATORIES, INC. 4335 West Dearborn Street Detroit, Michigan 48090-1234

NOTE: DOT SYMBOL WILL BE PLACED BETWEEN ITEMS (3) AND (4)

- (4) Date of Final Report completion
- (5) The words "FINAL REPORT"
- (6) The sponsoring agency's name and address as follows

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
Mail Code: NVS-220, Room W43-481
1200 New Jersey Ave., SE
Washington, DC 20590

15. REPORTS....Continued

B. FIRST PAGE AFTER COVER PAGE

When a contract test laboratory is reporting, a disclaimer statement and an acceptance signature block for the COTR shall be provided as follows:

This publication is distributed by the National Highway Traffic Safety Administration in the interest of information exchange. Opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof.

If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement.

Prepared By:	_
Approved By:	*
Approval Date:	
FINAL REPORT ACCEPTANCE BY OVSC: *	
Accepted By:	
Acceptance Date:	

^{*} These lines not required when OVSC staff writes the Test Report

15. REPORTS....Continued

C. SECOND PAGE AFTER FRONT COVER

A completed Technical Report Documentation Page (Form DOT F1700.7) shall be completed for those items that are applicable with the other spaces left blank. Sample data for the applicable block numbers of the title page follows.

Block 1 — REPORT NUMBER

537-ABC-XX-001

Block 2 — GOVERNMENT ACCESSION NUMBER

Leave blank

Block 3 — RECIPIENT'S CATALOG NUMBER

Leave blank

Block 4 — TITLE AND SUBTITLE

Final Report of 49 CFR Part 537 Compliance Testing of 200X Saferider 4-door sedan, NHTSA No. CX0401

Block 5 — REPORT DATE

Month Day, 20XX

Block 6 — PERFORMING ORGANIZATION CODE

ABC

Block 7 — AUTHOR(S)

John Smith, Project Manager Bill Doe, Project Engineer

Block 8 — PERFORMING ORGANIZATION REPORT NUMBER

ABC-DOT-XXX-001

15. REPORTS....Continued

Block 9 — PERFORMING ORGANIZATION NAME AND ADDRESS

ABC Laboratories 405 Main Street Detroit, MI 48070-1234

Block 10 — WORK UNIT NUMBER

Leave blank

Block 11 — CONTRACT OR GRANT NUMBER

DTNH22-XX-D-12345

Block 12 — SPONSORING AGENCY NAME AND ADDRESS

United States Department of Transportation National Highway Traffic Safety Administration Office of Vehicle Safety Compliance Mail Code: NVS-220 1200 New Jersey Avenue, SE Washington, DC 20590

Block 13 — TYPE OF REPORT AND PERIOD COVERED

Final Test Report Month Day to Month Day, 20XX

Block 14 — SPONSORING AGENCY CODE

NVS-220

Block 15 — SUPPLEMENTARY NOTES

Leave blank

15. REPORTS....Continued

Block 16 — ABSTRACT

Compliance tests were conducted on the subject 200X Saferider 4-door sedan in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP- 537 -0X for the determination of 49 CFR 537 Automotive Fuel Economy Reports. Test failures identified were as follows:

None

NOTE: Above wording must be shown with appropriate changes made for a particular compliance test. Any questions should be resolved with the COTR.

Block 17 — KEY WORDS

Compliance Testing Safety Engineering 49 CFR Part 537

Block 18 — DISTRIBUTION STATEMENT

Copies of this report are available from —

National Highway Traffic Safety Administration Technical Information Services Division, NPO-411 1200 New Jersey Avenue, SE (ROOM E12-100) Washington, DC 20590

Block 19 — SECURITY CLASSIFICATION OF REPORT

Unclassified

Block 20 — SECURITY CLASSIFICATION OF PAGE

Unclassified

Block 21 — NUMBER OF PAGES Add appropriate number

15. REPORTS....Continued

Block 22 — PRICE

Leave blank

15.3.4 TABLE OF CONTENTS

Final test report Table of Contents shall include the following:

Section 1 — Purpose of Compliance Test

Section 2 — Test Procedure and Discussion of Results

Section 3 — Test Data

Section 4 — Test Equipment List and Calibration Information

Section 5 — Photographs

Section 6 — Other Documentation

Section 7 — Notice of Test Failure (if applicable)

16. DATA SHEETS

DATA SUMMARY SHEET

VEHICL	LE MAKE/MODEL/BODY STYLE:		
VEHICL	LE NHTSA NO.: VIN:		
VEHICL	LE TYPE: DATE OF	MANUFACTURE:	
LABOR	RATORY:		
F	REQUIREMENTS	YES/NO	
T	Track Width		
	Measured front track width equals manufacturer provided front track width dimension.		
	Measured rear track width equals manufacturer provided rear track width dimension.		
V	Wheelbase		
	Measured right wheelbase equals manufacturer provided wheelbase dimension.		
	Measured left wheelbase equals manufacturer provided wheelbase dimension.		
F	Footprint		
	Calculated footprint equals manufacturer provided footprint dimension.		
F	RFMARKS:		

16. DATA SHEETS....continued

DATA SHEET 1 (sheet 1 of 2) TEST VEHICLE INSPECTION AND TEST PREPARATION

Vehicle Make/Model/Body Style:				
NHTSA No.:		Test Date:_		
Engine Size:	eading:	Miles (Kilometers)	
Dual Fuel Capable: () Y	'es	() No		
Drive Configuration: Front Wheel Drive (FWD) Four Wheel Drive (4WD)				
Certification Label Data:				
VIN:		Manufacture	e Date:	
GVWR:kg Front	GAWR:	kg	Rear GAWRkg	
Vehicle Type:	_			
Vehicle Placard Data (Tire and	Loading Info	rmation Lab	<u>el):</u>	
Seating Capacity: Total	Front _		Rear	
Vehicle Capacity Weight:		kg		
Designated Tire Size(s): Front Axle		Rear Axle _		
Installed Tire Size(s) on Vehicle	e:			
From Tire Sidewall	Front .	<u>Axle</u>	Rear Axle	
Manufacturer and Model Tire Size Designation				
Are installed tire sizes same as la If no, contact COTR for further gu		es?	Yes No	

16. DATA SHEETS....continued

DATA SHEET 1 (sheet 2 of 2) TEST VEHICLE INSPECTION AND TEST PREPARATION

Pre-Model Year Report Data (submitted by manufacturer of test vehicle):

Manufacturer:	Report Date:
Vehicle Classification of Test Veh () Passenger Car	nicle (as identified in report) r () Light Truck
Base Tires:	_
Wheelbase:in.	Track Width: Frontin. Rearin. Averagein.
Calculated Footprint (if provided)	ft²
REMARKS:	
RECORDED BY:APPROVED BY:	DATE:

16. DATA SHEETS....continued

DATA SHEET 2 VEHICLE MEASUREMENTS

Vehicle Make/Mod	el/Body Style	:			
Vehicle NHTSA No	D		Test Date:_		
Tire Pressures	Required:	Front Axle_	kPa	Rear Axle	kPa
	Actual:	LF RF	_kPa _kPa	LRkPa	l I
Track Width (mea	sured in inch	es and rounde	ed to the near	est tenth of an inch)):
Front Axle _		(in.)	A	(i.e.)	
Rear Axle _		(in.)	Average	(in.)	
<u>Wheelbase</u> (meas	sured in inche	s and rounded	I to the neare	st tenth of an inch):	
Right Side _		(in.)	A	(in)	
Left Side		(in.)	Average	(in.)	
Footprint (calcula	ted and round	led to the near	rest tenth of a	square foot):	
Avg. Track	Width (in) x A	vg. Wheelbas	e (in) / 144 =	Footprint (ft²)	
Footprint _		ft.²			
Does manufacture and calculated dat		wheelbase and ()Yes		a agree with actual	measured
If no explain:					
REMARKS: RECORDED BY:				DATE:	

17. FORMS

LABORATORY NOTICE OF TEST FAILURE TO OVSC

REGULATION or FMVSS NO	.: TEST DATE:
LABORATORY:	
	DELV. ORDER NO.:
	IGINEER'S NAME:
	TION:
VEHICLE NHTSA NO.:	VIN:
MFR:	
	N:
	QUIREMENT, PARAGRAPH S:
NOTIFICATION TO NHTSA (COTR):
DATE: BY	:
REMARKS:	

17. FORMS....Continued

MONTHLY TEST STATUS REPORT 49 CFR Part 537 DATE OF REPORT:

NO.	VEHICLE NHTSA NO., MAKE & MODEL	COMPLIANCE TEST DATE	PASS/ FAIL	DATE REPORT SUBMITTED	DATE INVOICE SUBMITTED	INVOICE PAYMENT DATE
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

17. FORMS....Continued

MONTHLY VEHICLE STATUS REPORT 49 CFR Part 537 DATE OF REPORT:

NO.	VEHICLE NHTSA NO., MAKE & MODEL	DATE OF DELIVERY	ODOMETER READING	TEST COMPLETE DATE	VEHICLE SHIPMENT DATE	ODOMETER READING
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						